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SUMMARY OF A MEMORIAL

TO BE PRESENTED TO

**THE RIGHT HONOURABLE THE LORD PROVOST,
MAGISTRATES, AND COUNCIL,**

RESPECTING THE INSTITUTION OF

**A PROFESSORSHIP OF PRACTICAL CHEMISTRY IN
THE UNIVERSITY OF EDINBURGH.**

By DR HOPE,

PROFESSOR OF CHEMISTRY.



SUMMARY OF MEMORIAL.

As the Memorial presented to the Honourable Patrons of the University by Dr REID, "On the present state of Practical Chemistry," and transmitted by them to the Senatus Academicus of the University for their consideration, refers to measures deeply affecting the welfare of the University at large, but more especially the Professor of Chemistry, Dr HOPE has considered it a duty which he owes to the Chair which he fills, and to his successors in office, to lay before the LORD PROVOST, MAGISTRATES and COUNCIL, with all due respect, the reasons which have led him to think that the Honourable Patrons ought not to countenance the scheme proposed by Dr REID.

As the reasons will be detailed at great length, the Memorial of Dr HOPE will be bulky, and as many of the gentlemen who may be desirous of becoming acquainted with the purport of it, may not have leisure or opportunity to peruse it, Dr HOPE begs leave to lay before the Patrons of the University in the mean time a summary view of its contents.

The Memorial of Dr REID embraces three heads:—1st, The establishment of a Chair of Practical Chemistry in the University of Edinburgh: 2^d, The appointment of himself as Professor to the new Chair: 3^d, The private arrangements between him and Dr HOPE.

These are considered in Dr HOPE's Memorial in succession.

INSTITUTION OF A PROFESSORSHIP OF PRACTICAL CHEMISTRY.

The Memorial of Dr HOPE states,—

I. That the institution of a new Chair ought to be a subject of serious consideration and mature deliberation, as the appointment, if injudicious, must be fraught with permanent evil to the University.

The Patrons ought to consider very maturely three points, and be fully satisfied in regard to each of them before they erect a new Chair. *a*, That the province assigned to it shall be of sufficient magnitude and importance, and suited for an Academic Chair. *b*, That there is a call for such an appointment, in consequence of the subject either not being taught at all in the College, or taught in a manner derogatory to the reputation of this great seminary; and, *c*, That the new appointment shall not encroach upon, or interfere with, or do injury to, any existing chair.

II. That Practical Chemistry, or the art of making Chemical Experiments, and conducting Chemical Processes, is a very important branch of chemical education, and ought to be studied by every one who is desirous of acquiring a competent knowledge of this department of science, or who may have occasion to direct his chemical knowledge to any of the numerous and valuable applications which may be made of its principles and practical operations to the purposes of life. Dr HOPE has, for above thirty years, strongly inculcated upon his pupils, at the close of every session, the importance of their engaging in the labours of the laboratory, and acquiring the knowledge and manual dexterity required for conducting chemical operations, by the actual performance of them. That, nevertheless, this description of instruction ought to remain within the province

of the Chair of Chemistry ; and, if wrongfully torn from it, would not constitute a proper object of a separate Chair.

III. That it is remarkable, that, while the science of Chemistry has been making the most rapid strides for half a century, a due sense of the importance of and desire for Practical Chemistry has become general within these few years only. That the same holds true, and is still more wonderful, in regard to Practical Anatomy.

From the moment the desire for Practical Chemistry became prevalent, it has been taught in the University with ample success.

The practical instructions were first delivered in Dr HOPE's laboratory by his experimental assistant Dr ANDERSON in the year 1823, with great ability and success, and Dr REID was a pupil during two sessions. The instructions were also ably given by Dr ANDERSON's successor, Dr LONGSTAFF ; and, since 1828, with much zeal and ability, by his present experimental assistant Dr D. B. REID.

As Practical Chemistry has been taught so effectively for such a length of time as a branch of University instruction, there is no reason to doubt that it will continue to be so ; and though Dr HOPE is to lose the services of Dr REID, yet, from the numerous applications for his situation from gentlemen of tried ability in the department of Practical Chemistry, and from the co-operation and superintendence Dr HOPE shall himself give, he may venture to assure the Honourable Patrons, that the fame of the existing Chemical School of the University will continue to be maintained unimpaired.

IV. That the representation made in the papers laid before the Patrons, that Dr HOPE's course of lectures is a theoretical one, is altogether erroneous and improper, and he

hopes has been made either from ignorance or inadvertency, and not wilfully and from design.

It is very absurd to call those lectures theoretical, in which the Professor annually performs and minutely explains all the circumstances of between 800 and 900 chemical processes and experiments, including all those of Chemical Pharmacy. During his incumbency, Dr HOPE has performed with his own hands, in the ordinary progress of his lectures, in the presence of above 13,000 students, between 30,000 and 40,000 such experiments and processes.

V. That as the students have had, for so many years, opportunities of complete practical instruction furnished by the Professor, and as there is no chance that these opportunities will be diminished, there certainly does not exist any call for a new chair, either on the score of this branch not being taught at all, or being taught in a manner derogatory to the Chemical School in the University.

VI. That a separate Chair of Practical Chemistry will be a decided encroachment on the Chemical Chair, inasmuch as it would cut off an important province belonging to that chair.

The solicited Chair will necessarily and unavoidably interfere with the existing chair.

If, along with the manipulation, the principles of the science, and the origin, properties, and uses of the various substances, are also taught (and it would be altogether impossible in a separate course of Practical Chemistry to avoid teaching them), the practical course would then become a field of chemical instruction, completely and entirely the same with that of the existing chair; the only difference being, that the professor will perform the experiments in the one class, and the students under his direction in the other. The Honourable Patrons have always disapproved of such interference, and have rejected va-

rious applications for new professorships, from the dread of the injustice and bad effects of it ; *e. g.* Dr Millar's in 1807 for a chair, the object of which was, " The application of the Sciences to the Arts," and Dr Barclay's, for a chair of Comparative Anatomy. If to prevent or diminish the chance of interference, the new chair should be rigidly confined to instruction in the manipulation or manual dexterity, and the performance of chemical processes, according to certain formulas, the subject would be altogether unsuitable for a professorship.

VII. That the creation of the proposed professorship will injure very materially the chemical chair in various ways. Thus, 1st, By robbing it of all the emoluments that may be derived from the courses of Practical Chemistry. Dr HOPE does not urge this from any pecuniary consideration which affects himself, as he has at present only a very trifling pecuniary interest in the matter (as will be seen by-and-by), but for the sake of his successors.—2^d, It was the custom for many students to attend Chemistry for two sessions, and the new chair will carry away nearly the whole of these second year students. Since the Practical Chemistry has been rendered imperative by different medical boards, particularly the Royal College of Surgeons of Edinburgh, a great proportion of the medical students take the Practical Chemistry, instead of a second course with the professor, as they formerly did.—3^d, The new chair will unquestionably also draw off a considerable proportion of the non-medical students of the first year, whether they shall study chemistry as a branch of general knowledge, or with the view of applying it to some professional purpose.

From the operation of various causes, a great diminution has already taken place in the emoluments of the chemical chair since 1823, which was the most productive year, and the pruning-knife has already gone as deep as the subject can bear, without vital injury.

VIII. That were there at this moment a vacancy in the Chemical Chair, when it would be in the power of the Honourable Patrons to make whatever arrangements they may think proper, without offering an outrage to the feelings, or injury to the interests, of the present incumbent, the creation of a Professorship of Practical Chemistry would not be a measure calculated to promote the general welfare of the University, and would be decidedly hurtful to the chemical department, both in regard to the professor and the student.

With respect to the University, it would afford an example of a pernicious tendency, of establishing two professorships on the same identical subject, or of frittering down professorships ; and give birth to numerous claimants from the departments of Anatomy, Scotch Law, Theology, Natural Philosophy, Natural History, ambitious of the honour and advantage of wearing a professor's gown.

It would be hostile to the interests of the Chemical School in the University to reduce still lower the emoluments of the Chemical Chair, by establishing another on the same subject : 1st, Because as long as the emoluments are good, upon a vacancy, the patrons will have the choice of almost every professional chemist in his Majesty's dominions, but when the chair is plundered and rendered bare by the spoliation, it will no longer hold out such temptation ; 2d, Because if the emoluments are left unimpaired, the professor of Chemistry will have no call to improve his income by engaging in the practice of Physic, as all his colleagues do, and so will be at liberty to devote his whole time and exertions to the varied duties of his chair, the cultivation of the science in general, and the application of it to the various arts and chemical manufactures.

Instructions in Practical Chemistry, and the application of Chemistry to Medicine, and the various purposes of life, constituting portions of the proper field of Chemistry, fall completely within the duties of the Chemical Chair, which the

Professor can easily overtake. It cannot be doubted that he will give the better general course, the more he is conversant with these portions.

When Dr HOPE filled the Chemical Chair in the University of Glasgow, he devoted much attention to the application of Chemistry to the Arts, because there were many chemical manufactories in that city and its vicinity.

The student will derive more advantage from carrying on, and completing his course of Chemical study, under the same teacher, than partly under one, and partly under another.

IX. That Dr HOPE is satisfied, after much consideration, that the method of teaching Practical Chemistry, most beneficial to the student, would be to establish a complete connexion between the general systematic lectures and the operations of the students in the Laboratory, and that they should be carried on simultaneously, *pari passu*.

The students ought to take their course of Practical Chemistry the same season with the systematic lectures. After becoming acquainted with all the facts and circumstances of any subject, from hearing the general lecture, and from seeing the Professor perform the requisite illustrative experiments, he should adjourn to the Laboratory, and thus duly prepared, he should there, under the guidance of the Professor and his assistants, perform the various operations with his own hands, and receive whatever farther practical instructions he may require. Dr HOPE intends to adopt this plan next winter.

CLAIM OF DR REID TO BE APPOINTED PROFESSOR OF PRACTICAL CHEMISTRY.

X. That in the autumn of 1828, when Dr (then Mr) REID made application, through Mr SINCLAIR, M. P., for

the situation of his Experimental Assistant, and when Mr SINCLAIR stated that Dr REID was anxious for the appointment upon any terms, Dr HOPE was not acquainted with Mr REID, and did not know him even by sight. He thought well of him from a small work which he had published; and in consequence of the strong recommendation of Mr SINCLAIR, and subsequent conversations with Mr REID himself, he engaged him.

Dr REID has performed his duties as Experimental Assistant, and Conductor of the Experimental Courses, with much zeal and ability; but, though Dr HOPE's choice had not fallen upon Dr REID, still the Chemical department of the University would not have lost any thing, either in reputation or utility, as he had applications for the situation from various individuals of talent, one of whom, in particular, had previously and has since distinguished himself much by his success in original researches.

Dr REID has not himself grounded any part of his pretensions upon having been the first to conduct Practical Courses as Dr HOPE's Experimental Assistant: on the contrary, it is announced in Dr REID's Memorial, that this department was conducted with great ability and success by Dr ANDERSON, who commenced in 1823, and that Dr REID himself was a student of his courses for two sessions. But though Dr REID does not make such pretensions, some of his testimonialists ignorantly hold him out as "having created the Chair, which he is naturally and laudably ambitious to fill;" and "as having planted as well as cultivated the vineyard."

Though Dr REID has performed his duties as Experimental Assistant to Dr HOPE's satisfaction, and has conducted the Practical Course with ability, Dr HOPE cannot imagine that his exertions, during so short a period as four years and a half, are grounds sufficient to induce the Patrons to create, for Dr REID's personal benefit, a new Professorship,

to the injury of a Professor who has filled the Chair for thirty-eight years, and in opposition to so many powerful objections which exist against the measure.

PRIVATE ARRANGEMENTS BETWEEN DR. HOPE AND
DR. REID.

XI. That Dr HOPE approaches the third head of Dr REID's Memorial, entitled "*Dr HOPE's connection with the Practical Course,*" with equal regret and concern.

With regret, because the subject of the private agreement and pecuniary arrangements between Dr HOPE and Dr REID is altogether irrelevant to the question of a new Chair, and ought not to have been obtruded upon the notice of the Honourable Patrons.

With concern, because Dr REID has strangely thought fit to present to the Honourable Patrons statements totally inconsistent with the real fact.

As these statements are calculated both to beget unnecessary feelings of sympathy for Dr REID, as a meritorious person whose valuable services had not obtained the pecuniary reward to which they are entitled, and to create impressions of want of liberality and rapaciousness derogatory to the character of the Professor, Dr HOPE is compelled to expose the misstatements of matters of fact in Dr REID's Memorial relative to this point, whatever the consequences may be to Dr REID from this exposure.

Three very different pecuniary agreements have subsisted between Dr HOPE and Dr REID, at different periods—Dr REID has stated the first imperfectly—the second very incorrectly, leading the Patrons at the same time to believe that it is the existing one, *and has suppressed entirely all mention of the existence, as well as of the terms, of the third agreement, which does in fact subsist at this moment.*

XII. That the statement of the first agreement in 1828 is imperfect, inasmuch as it omits to mention, that the allowance which Dr HOPE agreed to pay Dr REID was L. 50, and in representing the use of a room in the College as the prominent remuneration bestowed by Dr HOPE.

The second agreement took place in 1829. During that year, a degree of importance was conferred upon Practical Chemistry, which it had not previously possessed, by the Royal College of Surgeons rendering attendance upon it imperative upon every candidate for a Surgical Diploma; and Dr HOPE determined to give every eclat and consideration to the University courses. With much disturbance to his arrangements for his general Systematic Course, he relinquished his great Preparation Room, and fitted it up at a very considerable expense, with appropriate grates, sand and water bath, gas apparatus, furnaces, &c. &c. as a commodious Practical Class-room; and, upon becoming responsible to the Senatus that the Practical Courses should be worthy the Chemical School of the University, obtained the sanction of the Senatus for announcing the Practical Chemistry to be superintended by Dr HOPE, and conducted by Dr REID. He also resolved to open the courses by an introductory lecture in the usual academic professorial form.

Under the fullest conviction that these circumstances would cause an immediate and great increase in the number of the Students in the Practical Class, and a corresponding diminution of the number in the General Course, particularly of the second year's Students, Dr HOPE conceived himself entitled to a share in the emoluments of the Practical Courses, and proposed the following pecuniary arrangements:

1st, That Dr REID, being already possessed of a suitable moveable apparatus, should continue to use it.

2d, That Dr HOPE should defray whatever expense might be incurred in fitting up the new Class-room.

3d, That the whole fees should be divided between Dr

HOPE and Dr REID, in the proportion of one-third to Dr HOPE and two-thirds to Dr REID.

4th, That the whole expenses of every description, including sub-assistants and servant's wages, fuel, gas, materials to be consumed in the experiments, repair of all damage, purchase of apparatus to replace breakages, and whatever additional apparatus might be required on account of the increasing number of students, should be defrayed at the joint expense, in the proportion of one-third by Dr HOPE and two-thirds by Dr REID.

5th, That Dr HOPE should continue to pay Dr REID a salary of L. 50.

Dr REID expressed himself perfectly satisfied with every part of this arrangement, with the exception of the providing the new apparatus at the joint expense, as he wished to take that burden entirely upon himself, from the desire of being the sole proprietor of the whole moveable apparatus.

With this exception, the terms now stated were agreed upon, and continued in force for three years; but they are no longer so.

Dr REID has chosen to give an incorrect statement of this agreement. He represents that Dr HOPE drew one-third of the profits, and loaded Dr REID with the whole heavy current expenses, as well as the expense of providing an extension of the apparatus, and that in consequence Dr REID derived the most trifling and inadequate remuneration for his meritorious labour and expenditure.—*Vide* page 11. line 18, and p. 18, art. 4. &c. *

* Dr HOPE refers to the pages of Dr REID's Memorial presented to the Council, and to the Professors of the University. Many weeks after that Memorial had been before the public, Dr REID distributed a reprint of it, differently paged, in which the article No. 4. p. 18., above alluded to, is re-modelled. In it, the misstatement which he had given in that article is in part, but in part only, corrected.—*Vide* Reprint, p. 20. art. 4. *et seq.* If Dr REID, conscious that he had laid an erroneous statement

Dr REID has also chosen to take no notice of his continuing to receive a salary of L. 50.

The annual income which Dr REID derived from his College situation, stated at the average of the three years, was L. 330, out of which he had to purchase the additional apparatus. The apparatus, however, required for the Practical Course is by no means costly, and what Dr REID purchased became stock to him.

Dr HOPE believes that Dr Reid has expended a very considerable sum of money in purchasing apparatus of a superior description, and on a large scale, which is suitable for, and has been employed in the Popular Courses of Lectures on Chemistry which Dr REID has delivered.

The scale and quality of apparatus necessary for a popular display in the Assembly Rooms, or other great hall, are totally unfit for the service of the Students in a Practical Course; and no part of the money employed in procuring apparatus of this nature ought to be imputed to expenditure for the Practical Class.

During the three years' duration of the agreement of 1829, the sum of L. 420, 16s. became due to Dr HOPE as his share of the free income of the Practical Class; but it must not be supposed that all that was clear profit to him, as will appear from the following statement :

of the agreement of 1829 before the Patrons, had wished to undeceive them, and to obliterate the ungracious impression respecting Dr HOPE,—which his statement, that Dr HOPE drew one-third of the profits, and *threw the heavy burden of the whole expenses* upon Dr REID, so as to leave him a very trifling remuneration, was calculated to create,—he ought to have pointed out the fault he had committed, and perhaps made an apology for it. But, so far from doing so, the misrepresentation is given in the reprint at page 13, line 18. *et seq.* in full force as in the Memorial. Nor will the terms of the remodelled article remove that misrepresentation, which had already been widely promulgated. Dr HOPE must therefore direct his animadversions upon the statement impressed upon the mind of the public by Dr REID's Memorial.

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| Sum due to Dr Hope, | £ 420 16 0 |
| Sum paid by Dr HOPE for providing fixed apparatus for new Practical Class-room, | £ 133 0 0 |
| Sum paid to Dr REID as salary, | 150 0 0 |
| Sums voluntarily left with Dr REID out of the above, | 52 0 0 |
| | <hr/> 335 0 0 <hr/> |
| Sum remaining with Dr HOPE, | £ 85 16 0 |

This sum, divided for the three years, has given Dr HOPE the free annual gain of L. 28, 12s.

XIII. As Dr REID gives the full impression to the Honourable Patrons that the agreement of 1829, with all its harsh terms, as represented by Dr REID, is the one now in existence, and assigns the severity of it as one of the reasons which have determined him to resign his situation, Dr HOPE conceives that the astonishment of the Honourable Patrons will be very great, when they are informed that this second agreement is no longer in existence, and that Dr REID has entirely suppressed and kept out of view, both in the Memorial and reprint, all mention of the third agreement, which is the one now in force, and totally different from the preceding.

In January 1832, Dr REID conveyed to Dr HOPE expressions of dissatisfaction with some parts of the arrangements of 1829, and *inter alia* complained that his remuneration was by no means adequate, and proposed a new rate of division of the pecuniary returns, to the following purport :

1. That all the current expenses of the Practical Courses, of every description, should in the first place be defrayed from the aggregate amount of the fees.

2. That Dr REID should receive L. 270 from the said aggregate sum.

3. That the remainder should be equally divided between Dr HOPE and Dr REID.

Dr HOPE, though he conceived that his interest was not at

all considered in this arrangement, yet, being satisfied with the manner with which the duties of his experimental assistant had been fulfilled, and desirous to secure Dr REID's labours as conductor of the Practical Courses, and perhaps preferring to lose some annual income to encountering the annoyance of a change of assistant, acceded to these terms, which have been in operation since the 1st of November 1832.

According to the scheme of division now mentioned, and taking the number of pupils at 201, as it was last year, and the average expense for each at L. 1, the nett sum which will fall to Dr REID will be L. 351, to which is still to be added his salary of L. 50, making the total amount of free income, in remuneration for his college labour, L. 401. On the other hand, the benefit which will accrue to Dr HOPE will be, 1st, Having the duties of his experimental assistant duly performed; and, 2d, The sum of L. 81, less the salary of L. 50, paid by him to Dr REID, or L. 31.

Though the sum which will fall to Dr HOPE, is utterly disproportioned to the share he furnishes in the concern, and to the loss he sustains in his regular course, yet Dr HOPE was anxious to retain Dr REID upon these terms, and used his best endeavours to persuade him to remain, at the time when Dr REID, in the beginning of the session, announced his intention of giving up his situation, when their agreement shall terminate in October 1833.

From the statements above given, Dr HOPE trusts the Honourable Patrons will be satisfied that he has not been illiberal in his arrangements with Dr REID, and that he does not lose his services in consequence of the remuneration awaiting him being either trifling or inadequate.

The Lord Provost and Council will not be surprised that Dr HOPE is extremely indignant that his Experimental Assistant has presented to them so many statements inconsistent with the matter of fact, and certainly in terms not cal-

culated to create impressions favourable to the Professor in the minds of the Honourable Patrons of the University, of the Senatus Academicus, or the multitude of individuals to whom Dr REID's Memorial has been distributed; and more especially, that he has suppressed all mention of the existing agreement.

3d May 1833.

